WHAT IS CLAIMED IS:

1.   An image pickup device comprising:

an imaging section that executes a moving picture pickup processing and a still picture pickup processing;

5   a voice recording section that executes a voice recording processing in parallel with the moving picture pickup processing; and

an interrupt processing section that sequentially executes, during the moving picture pickup processing by the imaging section, a processing to suspend the moving picture pickup processing by the imaging section, a

10   processing to pickup a still picture by the imaging section, and a processing to resume the moving picture pickup processing by the imaging section,

wherein the interrupt processing section continually executes the voice recording processing executed by the voice recording section in parallel with the moving picture pickup processing before the moving

15   picture pickup processing is suspended, until the moving picture pickup processing is resumed.

2.   An image pickup device according to claim 1, further comprising a moving picture file creation section that creates a single

20   moving picture file that includes moving picture frames obtained through the moving picture pickup processing executed before the still picture pickup processing by the imaging section, and moving picture frames obtained through the moving picture pickup processing resumed after the still picture pickup processing.

3.   An image pickup device according to claim 2, further

comprising a recording section that stores the single moving picture file

created by the moving picture file creation section, correlated with voice

5   data obtained through the voice recording processing executed by the voice

recording section.

4.   An image pickup device according to claim 1, further

comprising a sound output section that outputs a notice tone along with a

10   specified processing, and a notice tone control section that prohibits a

processing to output a notice tone by the sound output section during the

moving picture pickup processing and an interrupt processing executed by

the interrupt processing section.

15   5.   An image pickup device according to claim 4, further

comprising an image pickup preparation instruction section that instructs

an execution of at least one of an auto focus processing and an auto iris

processing for the still picture pickup processing, and an image pickup

preparation control section that executes at least one of the auto focus

20   processing and the auto iris processing, when the image pickup preparation

instruction section instructs an execution of at least one of the auto focus

processing and the auto iris processing, wherein the sound output section

outputs a notice tone along with at least one of the auto focus processing

and the auto iris processing.

6. An image pickup device according to claim 4, further comprising an image pickup instruction section that instructs to pickup a still picture, wherein the interrupt processing section executes the still

5 picture pickup processing when the image pickup instruction section instructs to pickup a still picture, and the sound output section outputs a notice tone along with the still picture pickup processing.

7. An image pickup device according to claim 1, further

10 comprising an image pickup instruction section that instructs to pickup a still picture during a moving picture pickup processing by the imaging section, wherein, in response to an instruction to pickup a still picture given by the image pickup instruction section, the interrupt processing section sequentially executes a processing to suspend the moving picture pickup

15 processing by the imaging section, a processing to pickup a still picture by the imaging section, and a processing to resume the moving picture pickup processing by the imaging section.

8. An image pickup device according to claim 1, wherein the

20 interrupt processing section executes the processing to resume the moving picture pickup processing by the imaging section upon completion of the still picture pickup processing.

9. An image pickup device according to claim 7, further

comprising an image pickup preparation instruction section that instructs an execution of at least one of an auto focus processing and an auto iris processing for the still picture pickup processing during the moving picture pickup processing by the imaging section, and an image pickup preparation

5 control section that executes at least one of the auto focus processing and the auto iris processing, when the image pickup preparation instruction section instructs an execution of at least one of the auto focus processing and the auto iris processing.

10 10. An image pickup device according to claim 9, further comprising a shutter button capable of depressing in two stages, wherein the image pickup preparation instruction section instructs an execution of at least one of the auto focus processing and the auto iris processing for the still picture pickup processing in response to a half depression operation of

15 the shutter button, and the image pickup instruction section instructs to pickup a still picture in response to a full depression operation of the shutter button.

11. An image pickup device according to claim 1, further

20 comprising a suspension instruction section that instructs to suspend the moving picture pickup processing by the imaging section, and an image pickup instruction section that instructs to pickup a still picture, wherein the interrupt processing section executes a processing to suspend the moving picture pickup processing by the imaging section when the

suspension instruction section instructs to suspend the moving picture

pickup processing, and then, executes a still picture pickup processing by

the imaging section when the image pickup instruction section instructs to

pickup a still picture.

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12.   An image pickup device according to claim 11, further

comprising a shutter button capable of depressing in two stages, wherein

the suspension instruction section instructs to suspend the moving picture

pickup processing by the imaging section in response to a half depression

10   operation of the shutter button, and the image pickup instruction section

instructs to pickup a still picture in response to a full depression operation

of the shutter button.

13.   An image pickup device according to claim 11, wherein the

15   interrupt processing section executes at least one of an auto focus

processing and an auto iris processing, when the suspension instruction

section instructs to suspend the moving picture pickup processing.

14.   An image pickup device according to claim 11, wherein the

20   interrupt processing section executes a through picture display processing,

when the suspension instruction section instructs to suspend the moving

picture pickup processing.

15.   An image pickup device according to claim 1, further

comprising a resumption instruction section that instructs to resume the

moving picture pickup processing by the imaging section, wherein the

interrupt processing section executes a processing to resume the moving

picture pickup processing by the imaging section, when the resumption

5   instruction section instructs to resume the moving picture pickup

processing by the imaging section after the still picture pickup processing is

completed.

16.   An image pickup device according to claim 15, further

10   comprising a shutter button capable of depressing in two stages, wherein

the resumption instruction section instructs to resume the moving picture

pickup processing by the imaging section in response to releasing of a half

depression operation of the shutter button.

15   17.   An image pickup device according to claim 2, further

comprising a recording section that records the single moving picture file

created by the moving picture file creation section.

18.   An image pickup device according to claim 2, further

20   comprising a substitute frame creation section that creates substitute

frames substituting for moving picture frames missing due to suspension of

the moving picture pickup processing, wherein the moving picture file

creating section creates a moving picture file including the substitute

frames created by the substitute frame creation section.

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19.　An image pickup device according to claim 18, wherein the substitute frame creation section creates the substitute frames using moving picture frames obtained through the moving picture pickup

5　processing executed immediately before the moving picture pickup processing is suspended.

20.　An image pickup device according to claim 18, wherein the substitute frame creation section creates the substitute frames using a still

10　picture frame obtained through the still picture pickup processing by the imaging section.

21.　An image pickup device according to claim 1, further comprising a synchronizing control section that synchronizes a start timing

15　to resume the moving picture pickup processing by the imaging section with a moving picture frame pickup cycle of the moving picture pickup processing conducted before the moving picture pickup processing is suspended.

20　22.　An image pickup device according to claim 1, further comprising a timer section that measures the time elapsed since the processing to suspend the moving picture pickup processing is executed by the interrupt processing section, a judging section that judges as to whether or not the time measured by the timer section has reached a predetermined

time before the processing to resume the moving picture pickup processing

by the interrupt processing section is executed, and a predetermined

processing execution section that executes a predetermined processing

when the judging section determines that the predetermined time has been

5   reached.

23.   An image pickup device according to claim 22, further

comprising an image pickup instruction section that instructs to pickup a

still picture, wherein the predetermined processing execution section

10   executes a notice processing to urge an instruction to pickup a still picture

by the image pickup instruction section.

24.   An image pickup device according to claim 22, wherein the

predetermined processing execution section causes the interrupt processing

15   section to forcefully execute the processing to resume the moving picture

pickup processing by the interrupt processing section.

25.   An image pickup device according to claim 1, wherein the

interrupt processing section executes the still picture pickup processing a

20   plurality of times during a period starting when the processing to suspend

the moving picture pickup processing is executed until the processing to

resume the moving picture pickup processing is executed.

26.   An image pickup device according to claim 25, wherein the

interrupt processing section limits the maximum execution number of the

still picture pickup processing that is executed during a period starting

when the processing to suspend the moving picture pickup processing is

executed until the processing to resume the moving picture pickup

5   processing is executed.

27.   An image pickup device according to claim 26, wherein the

interrupt processing section includes a section that forcefully executes the

processing to resume the moving picture pickup processing, when the

10   number of execution of the still picture pickup processings has reached the

maximum execution number.

28.   An image pickup device according to claim 25, further

comprising an image pickup instruction section that instructs to pickup a

15   still picture, wherein, when the image pickup instruction section repeatedly

instructs to pickup still pictures, the interrupt processing section

repeatedly executes the still picture pickup processing during a period

starting when the processing to suspend the moving picture pickup

processing is executed until the processing to resume the moving picture

20   pickup processing is executed

29.   An image pickup device comprising:

an imaging section that executes a moving picture pickup processing

and a still picture pickup processing;

an interrupt processing section that sequentially executes, during

the moving picture pickup processing by the imaging section, a processing

to suspend the moving picture pickup processing by the imaging section, a

processing to pickup a still picture by the imaging section, and a processing

5   to resume the moving picture pickup processing by the imaging section; and

a synchronization control section that synchronizes a start timing for

resuming the moving picture pickup processing by the imaging section with

a moving picture frame pickup cycle of the moving picture pickup

processing taking place before the moving picture pickup processing is

10   suspended.

30.   An image pickup device comprising:

an imaging section that executes a moving picture pickup processing

and a still picture pickup processing;

15   an interrupt processing section that sequentially executes, during

the moving picture pickup processing by the imaging section, a processing

to suspend the moving picture pickup processing by the imaging section, a

processing to pickup a still picture by the imaging section, and a processing

to resume the moving picture pickup processing by the imaging section;

20   a timer section that measures a time elapsed since the execution of

the processing to suspend the moving picture pickup processing by the

interrupt processing section;

a judging section that determines whether the elapsed time

measured by the timer section has reached a predetermined length of time

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before the processing to resume the moving picture pickup processing is

executed by the interrupt processing section; and

a predetermined processing execution section that executes a

predetermined processing if the determination section determines that the

5   predetermined length of time has been reached.

31.   An imaging device comprising:

an imaging section that executes a moving picture pickup processing

and a still picture pickup processing; and

10   an interrupt processing section that sequentially executes, during

the moving picture pickup processing by the imaging section, a processing

to suspend the moving picture pickup processing by the imaging section, a

processing to pickup a still picture by the imaging section, and a processing

to resume the moving picture pickup processing by the imaging section,

15   wherein the interrupt processing section executes the still picture

pickup processing a plurality of times between the time the processing to

suspend the moving picture pickup processing is executed and the time the

processing to resume the moving picture pickup processing is executed.

20   32.   An imaging method for an image pickup device with a function

to pickup still pictures during a moving picture pickup operation, the

imaging method comprising:

a step for executing a moving picture pickup processing;

a step for executing a voice recording processing in parallel with the

moving picture pickup processing;

a step for sequentially executing, during the moving picture pickup processing, a processing to suspend the moving picture pickup processing, a processing to pickup a still picture, and a processing to resume the moving

5 picture pickup processing; and

a step for continuing the execution of the voice recording processing, which is executed in parallel with the moving picture pickup processing before the moving picture pickup processing is suspended, until the moving picture pickup processing is resumed.

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33. An imaging method for an image pickup device with a function to pickup still pictures during a moving picture pickup operation, the imaging method comprising:

a step for executing the moving picture pickup processing;

15 a step for sequentially executing, during the moving picture pickup processing, a processing to suspend the moving picture pickup processing, a processing to pickup a still picture, and a processing to resume the moving picture pickup processing; and

a step for synchronizing a start timing to resume the moving picture

20 pickup processing with a moving picture frame pickup cycle of the moving picture pickup processing executed before the moving picture pickup processing is suspended.

34. An imaging method for an image pickup device with a function

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to pickup still pictures during a moving picture pickup operation, the
imaging method comprising:

a step for executing a moving picture pickup processing;

a step for sequentially executing, during the moving picture pickup

5   processing, a processing to suspend the moving picture pickup processing, a

processing to pickup a still picture, and a processing to resume the moving

picture pickup processing;

a step for measuring a time elapsed since the execution of the

processing to suspend the moving picture pickup processing;

10   a step for determining whether the elapsed time measured has

reached a predetermined length of time before the processing to resume the

moving picture pickup processing is executed; and

a step for executing a predetermined processing if it is determined

that the predetermined length of time has been reached.

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35.   An imaging method for an image pickup device with a function

to pickup still pictures during a moving picture pickup operation, the

imaging method comprising:

a step for executing a moving picture pickup processing;

20   a step for sequentially executing, during the moving picture pickup

processing, a processing to suspend the moving picture pickup processing, a

processing to pickup a still picture, and a processing to resume the moving

picture pickup processing; and

a step for executing the still picture pickup processing a plurality of

times between the time the processing to suspend the moving picture

pickup processing is executed and the time the processing to resume the

moving picture pickup processing is executed.

5   36.   A program that renders a computer of an image pickup device

with a function to pickup still pictures during a moving picture pickup

operation to execute:

a processing for executing a moving picture pickup processing;

a processing for executing a voice recording processing in parallel

10   with the moving picture pickup processing;

a processing for sequentially executing, during the moving picture

pickup processing, a processing to suspend the moving picture pickup

processing, a processing to pickup a still picture, and a processing to

resume the moving picture pickup processing; and

15   a processing for continuing the execution of the voice recording

processing, which is executed in parallel with the moving picture pickup

processing before the moving picture pickup processing is suspended, until

the moving picture pickup processing is resumed.

20   37.   A program that renders a computer of an image pickup device

with a function to pickup still pictures during a moving picture pickup

operation to execute:

a processing for executing a moving picture pickup processing;

a processing for sequentially executing, during the moving picture

pickup processing, a processing to suspend the moving picture pickup processing, a processing to pickup a still picture, and a processing to resume the moving picture pickup processing; and

a processing for synchronizing a start timing to resume the moving

5 picture pickup processing with a moving picture frame pickup cycle of the moving picture pickup processing conducted before the moving picture pickup processing is suspended.

38. A program that renders a computer of an image pickup device

10 with a function to pickup still pictures during a moving picture pickup operation to execute:

a processing for executing a moving picture pickup processing;

a processing for sequentially executing, during the moving picture pickup processing, a processing to suspend the moving picture pickup

15 processing, a processing to pickup a still picture, and a processing to resume the moving picture pickup processing;

a processing for measuring a time elapsed since the execution of the processing to suspend the moving picture pickup processing;

a processing for judging whether the elapsed time measured has

20 reached a predetermined length of time before the processing to resume the moving picture pickup processing is executed; and

a processing for executing a predetermined processing if a determination is made that the predetermined length of time has been reached.

39.   A program that renders a computer of an image pickup device

with a function to pickup still pictures during a moving picture pickup

5   operation to execute:

a processing for executing a moving picture pickup processing;

a processing for sequentially executing, during the moving picture

pickup processing, a processing to suspend the moving picture pickup

processing, a processing to pickup a still picture, and a processing to

10   resume the moving picture pickup processing; and

a processing for executing the still picture pickup processing a

plurality of times between the time the processing to suspend the moving

picture pickup processing is executed and the time the processing to resume

the moving picture pickup processing is executed.